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MMUS COMMENTARY & PORTFOLIO:  
SEEING THE INVISIBLE, HEARING THE INAUDIBLE

Ronald MacNiven  
MMus (Composition)  
September 2013



RONALD MACNIVEN

THREE MACKINTOSH STUDIES

*for solo piano*

1. FRITILLARIA    Freely (♩ = c. 76)
2. JAPONICA      Delicate (♩ = c. 54)
3. SPURGE        With movement (♩ = c.108)



# THREE MACKINTOSH STUDIES

Duration c. 12

Ronald MacNiven

## 1. FRITILLARIA

**Freely** (♩ = c. 76)

Measures 1-4 of the piece. The music is in G major (one sharp). Measure 1 is in 5/16 time, measure 2 in 4/8, measure 3 in 9/16, and measure 4 in 7/16. The piano part begins with a *p* (piano) dynamic. A *Ped.* (pedal) line is indicated below the first two measures.

Measures 5-8. Measure 5 is in 5/16 time, measure 6 in 3/8, measure 7 in 5/16, and measure 8 in 3/16. The piano part features complex arpeggiated figures and sustained chords.

Measures 9-13. Measure 9 is in 2/8 time, measure 10 in 3/8, measure 11 in 4/8, measure 12 in 3/16, and measure 13 in 9/16. The piano part continues with intricate textures, including some triplets and sustained notes.

Measures 14-18. Measure 14 is in 7/16 time, measure 15 in 5/16, measure 16 in 7/16, measure 17 in 3/16, and measure 18 in 6/16. Above measures 14 and 15 is the marking *rit.* (ritardando), and above measure 16 is *a tempo*. A *Ped.* line is indicated below measures 14 and 15.

**accel.**

19

*p* *ff* *sub. p*

*Ped.*

**a tempo**

24

*ff* *sub. p*

*Ped.*

**rall.**

28

*ff* *sub. p*

*Ped.*

**a tempo**

**rall.**

32

*p* *pp*

*Ped.*

## 2. JAPONICA

**Delicate** (♩ = c. 54)

Musical score for measures 1-3. The piece is in 4/4 time with a tempo of approximately 54 beats per minute. The key signature has one sharp (F#). The first system shows measures 1, 2, and 3. Measure 1 starts with a mezzo-forte (mf) dynamic. Measure 3 features a forte (f) dynamic and a trill on the right hand.

Musical score for measures 4-7. Measure 4 is marked with a '4' and the instruction 'diminuendo'. Measure 6 is marked with a 'p' (piano) dynamic. Measure 7 features a 'poco allarg.' (poco allargando) instruction and a triplet of eighth notes.

Musical score for measures 8-11. Measure 8 is marked with an '8' and the instruction 'a tempo'. Measures 9 and 10 are marked with an 'mp poco accell.' (mezzo-piano poco accelerando) instruction. Measure 11 returns to 'a tempo'. A 'Ped.' (pedal) line spans from the end of measure 8 to the end of measure 11.

Musical score for measures 12-15. Measure 12 is marked with a '12'. Measures 13 and 14 are marked with 'crescendo e. accellerando' (crescendo and accelerating). Measure 15 is marked with a '3' (triplet) and the instruction 'f diminuendo e. rallentando' (forte diminuendo and decelerando). The system ends with a mezzo-forte (mf) dynamic. A 'Ped.' (pedal) line spans from the end of measure 12 to the end of measure 15.



4  
16 *a tempo* *accelerando* *ff marc.*

*(mp)*

Ped.

20 *p a tempo (as echo)*

24 *accel.* *a tempo*

Ped.

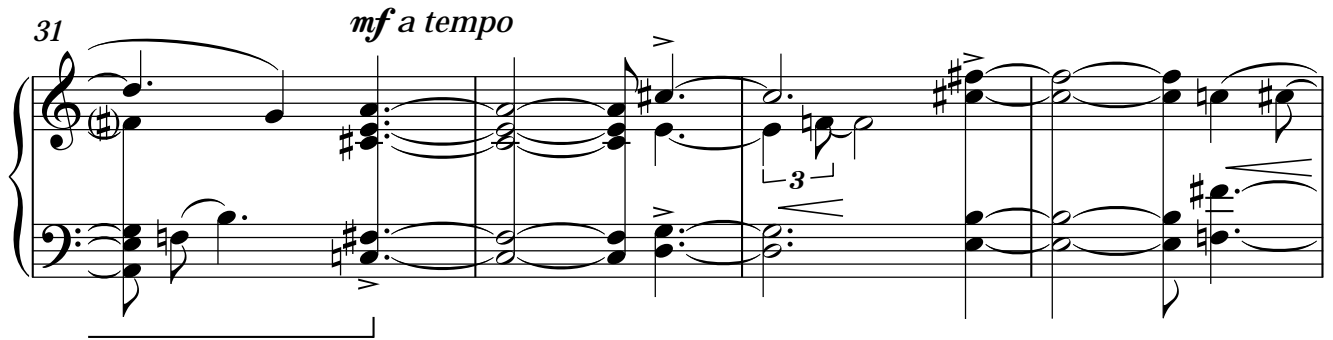
27 *poco allarg.* *a tempo* *crescendo e. accelerando*

*p*

3

Ped.

31 *mf a tempo*



35 *f diminuendo* *mf* *diminuendo e. rallentando* *p*



40 *a tempo* *mf*



43 *diminuendo e. rallentando* *p (l.v.)*



## 3. SPURGE

With movement (♩ = c.108)

Measures 1-2 of the musical score. The key signature has one sharp (F#) and the time signature is 9/8. The music is written for piano. Measure 1 starts with a piano (*p*) dynamic. Measure 2 has a mezzo-piano (*mp*) dynamic. Measure 3 has a mezzo-forte (*mf*) dynamic. The melody is in the right hand, and the bass line is in the left hand. The music features a series of chords and single notes, with a crescendo leading into measure 3.

Measures 3-4 of the musical score. Measure 3 starts with a forte (*f*) dynamic. Measure 4 has a mezzo-forte (*mf*) dynamic. The melody is in the right hand, and the bass line is in the left hand. The music features a series of chords and single notes, with a crescendo leading into measure 4.

Measures 5-6 of the musical score. Measure 5 starts with a piano (*p*) dynamic. Measure 6 has a mezzo-forte (*mf*) dynamic. The melody is in the right hand, and the bass line is in the left hand. The music features a series of chords and single notes, with a crescendo leading into measure 6.

Measures 7-8 of the musical score. Measure 7 starts with a mezzo-piano (*mp*) dynamic. Measure 8 has a mezzo-forte (*mf*) dynamic. The melody is in the right hand, and the bass line is in the left hand. The music features a series of chords and single notes, with a crescendo leading into measure 8.

11 **rall.** . . . . **a tempo**

*p* *pp*

14 **accel.** . . . .

*crescendo*

17 . . . . **a tempo**

*trem.* *f* *mf* *p*

20

*mp* *cresc.* *f*

24

*mf* *p*

4:3

4:3

27

*(mf)*

30

*f* *p* **rall.**

33

**a tempo**

**rit.** . . . . . **a tempo**

37

*crescendo* *trem.* *f* *mp*

40

*p* *f* *f* *sub. mp*

44

*f sonore* *diminuendo*

46

**rit.** *p* 4:3



Ronald MacNiven

## Fjordscape

*for Alto Saxophone, Vibraphone and Piano*





Duration: c. 6'30"

# Fjordscape

Ronald MacNiven

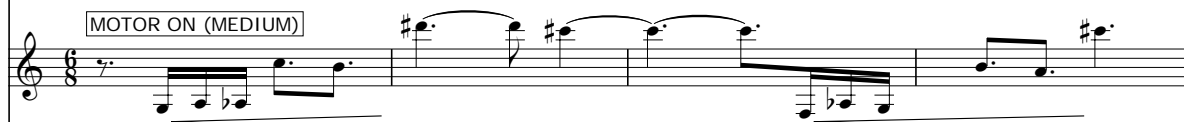
Spacious, with an icy resonance (♩ = c. 84)

Alto Sax in E♭



Vibraphone

MOTOR ON (MEDIUM)

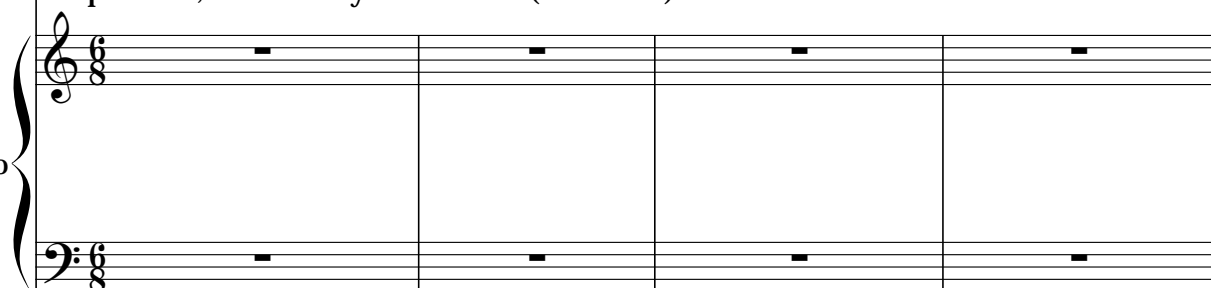


*mp solo, hard beaters*

Pedal

Spacious, with an icy resonance (♩ = c. 84)

Piano



Sax

5

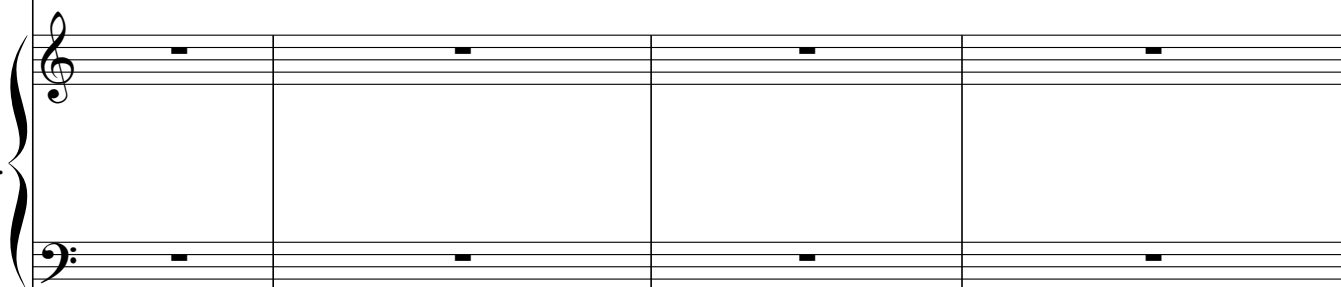


*p*

Vib.



Pno.



\* Saxophone part transposed in score

9 **1**

Sax

*mf*

Vib.

Pno. **1** *8va* *p* *mf* *meno*

*Ped.*

Detailed description: This block contains the first system of a musical score, measures 9 through 12. The Saxophone part begins at measure 9 with a first ending bracket labeled '1'. It features a melodic line with eighth and quarter notes, some with slurs. The dynamic is mezzo-forte (mf). The Vibraphone part has chords in measures 9 and 10, with a first ending bracket. The Piano part also has a first ending bracket, starting with a piano (p) dynamic and moving to mezzo-forte (mf) and then meno. A dashed line indicates an octave (8va) shift. A pedal line is indicated below the piano part.

13

Sax

*sub. f*

Vib.

*f marc.*

Pno. *8va* *mf*

Detailed description: This block contains the second system of a musical score, measures 13 through 16. The Saxophone part begins at measure 13 with a sub-forte (sub. f) dynamic. The Vibraphone part has chords in measures 13 and 14, with a forte marcato (f marc.) dynamic. The Piano part has a first ending bracket, starting with a mezzo-forte (mf) dynamic and moving to meno. A dashed line indicates an octave (8va) shift.

16 **2**

Sax *p*

Vib. *p*

Pno. **2** *p*

Rehearsal mark 2 is located above the Saxophone staff at measure 16.

19

Sax *f*

Vib. *mf*

Pno. *f*

Rehearsal mark 2 is located above the Saxophone staff at measure 19.

24 **3** **rit.** **a. tempo**

Sax

Vib.

Pno.

Measure 24: Saxophone rests. Vibraphone enters with a half note G4 (flat) and a half note A4 (flat). Saxophone enters in measure 25 with a half note G4 (flat) and a half note A4 (flat). Piano accompaniment begins in measure 25 with a half note G4 (flat) and a half note A4 (flat). The section is marked 'rit.' (ritardando) and 'a. tempo' (allegretto tempo). Dynamics include 'f' (forte).

28

Sax

Vib.

Pno.

Measure 28: Saxophone continues with a half note G4 (flat) and a half note A4 (flat). Vibraphone continues with a half note G4 (flat) and a half note A4 (flat). Piano accompaniment continues with a half note G4 (flat) and a half note A4 (flat). The section is marked 'f' (forte). Measure 29: Saxophone continues with a half note G4 (flat) and a half note A4 (flat). Vibraphone continues with a half note G4 (flat) and a half note A4 (flat). Piano accompaniment continues with a half note G4 (flat) and a half note A4 (flat). The section is marked 'f' (forte). Measure 30: Saxophone continues with a half note G4 (flat) and a half note A4 (flat). Vibraphone continues with a half note G4 (flat) and a half note A4 (flat). Piano accompaniment has rests. The section is marked 'meno' (meno forte).

31 **4**

Sax. *(p)*

Vib.

Pno. **4**  
*mp solo marc.*

Measures 31-34: Saxophone (Sax.) has a single note at measure 31. Vibraphone (Vib.) is silent. Piano (Pno.) has a complex melodic line in the right hand and a supporting bass line in the left hand, marked *mp solo marc.*

35

Sax.

Vib.

Pno. *f*

Measures 35-38: Saxophone (Sax.) and Vibraphone (Vib.) are silent. Piano (Pno.) has a complex melodic line in the right hand and a supporting bass line in the left hand, marked *f*.

38 **5**

Sax

*mf*

Vib.

*mp ponderous*

*f*

**5**

Pno.

*mf*

42

Sax

*sf*

Vib.

*trem.*

*f*

*trem.*

Pno.

*fuoco*

*sf*

46 **6**

Sax.

Vib.

Pno.

*ff* *sub. p* *mp* *p*

*p* *f* *mp*

50

Sax.

Vib.

Pno.

*p*



54 **7**

Sax

*p*

Vib.

*p*

**7**

Pno.

*p*

8<sup>va</sup>

54 55 56 57

58

Sax

*molto allargando*

*a. tempo*

*ff*

*tremolo*

Vib.

*ff*

*sub. p*

*molto allargando*

*a. tempo*

*tremolo molto cresc.*

*ff*

Pno.

58 59 60 61

62 **8**

Sax

*p esp.*

Vib.

Pno.

Measures 62-65: Saxophone part has a melodic line with slurs and dynamic marking *p esp.*. Vibraphone and Piano parts are silent.

66

Sax

*f*

Vib.

*mf*

Pno.

*mf*

Measures 66-69: Saxophone part has a melodic line with slurs and dynamic marking *f*. Vibraphone and Piano parts are silent until measure 69, where they enter with a chord and dynamic marking *mf*.

70 **9**

Sax

Vib.

Pno.

The image shows a musical score for three instruments: Saxophone (Sax), Vibraphone (Vib.), and Piano (Pno.). The score is written for measures 70 and 71. Measure 70 is marked with a rehearsal mark '9' in a box. The Saxophone part is mostly silent in measure 70. The Vibraphone and Piano parts feature complex rhythmic patterns and chords. The Piano part has a prominent bass line with sustained notes and a treble line with chords and moving lines. The Vibraphone part has a melodic line with sustained notes and a complex rhythmic pattern. The score is written in a key with one flat (B-flat) and a 4/4 time signature.

73

Sax

Vib.

Pno.

*mf* *f* *morendo*

*f* *(morendo)*

*(morendo)*

*f*

Detailed description: This is a musical score for three instruments: Saxophone (Sax), Vibraphone (Vib.), and Piano (Pno.). The score is for measures 73 through 76. The Saxophone part starts with a whole rest in measure 73, then plays a series of eighth notes with a descending melodic line, marked *mf*, and then a series of eighth notes with a descending melodic line, marked *f*, and finally a series of eighth notes with a descending melodic line, marked *morendo*. The Vibraphone part starts with a whole note chord in measure 73, then plays a series of eighth notes with a descending melodic line, marked *f*, and finally a series of eighth notes with a descending melodic line, marked *(morendo)*. The Piano part starts with a series of eighth notes with a descending melodic line, marked *(morendo)*, and then a series of eighth notes with a descending melodic line, marked *f*, and finally a series of eighth notes with a descending melodic line, marked *(morendo)*.

RONALD MACNIVEN

A WOMAN STARES OUT FROM THE KINTAI BRIDGE  
*for orchestra*

*Orchestra:*

2 Flutes (2nd doubling on piccolo\*)

2 Oboes

2 Clarinets in B $\flat$ \*

2 Bassoons

4 Horns in F\*

2 Trumpets in B $\flat$ \*

3 Trombones

Tuba

Vibraphone/Glockenspiel\*

Timpani

Harp

Violin I

Violin II

Viola

Violoncello

Contrabass\*

\*All instruments notated as sounding, except Piccolo (1 octave higher),  
Glockenspiel (2 octaves higher) and Contrabass (1 octave lower)



## A Woman Stares Out From The Kintai Bridge

**Moderate and Sustained** (♩ = c. 72)

Flute 1  
Flute  
Flute 2/Picc.  
Oboe 1  
Oboe 2  
Clarinet in B♭ 1  
Clarinet in B♭ 2  
Bassoon 1  
Bassoon 2  
Horn in F 1  
Horn in F 2  
Horn in F 3  
Horn in F 4  
Trumpet in B♭ 1  
Trumpet in B♭ 2  
Trombone 1  
Trombone 2  
Trombone 3  
Tuba

**Moderate and Sustained** (♩ = c. 72)  
(A♭, B♭, C♭, E♭)  
Timpani  
Percussion  
Vibraphone  
Harp  
(D♭, C♭, B♭, E♭, F♭, G♭, A♭)  
(B♭, E♭, G♭)

**Moderate and Sustained** (♩ = c. 72)  
Violin I  
Violin II  
Viola  
Violoncello  
Contrabass

div. a 2  
f trem.  
div. a 2  
f trem.  
div. a 2  
f trem.  
div. a 2  
f trem.  
div. a 2  
f trem.  
tutti  
p sub.  
f trem.

**1 A little slower** (♩ = c. 66)

Fl. 1 *p*

Fl. 2/  
Picc. *p*

Ob. 1 *p solo*

Ob. 2 *p*

Cl. 1 *p*

Cl. 2 *p*

Bsn. 1 *p*

Bsn. 2 *p*

Hn. 1 *p*

Hn. 2 *p*

Hn. 3 *p*

Hn. 4 *p*

Tpt. 1 *p*

Tpt. 2 *p*

Tbn. 1

Tbn. 2

Tbn. 3

Tba.

**1 A little slower** (♩ = c. 66)

Timp.

Perc. *p*

Harp. (E♭, F♯, G♯, A♭) *p* (E♭, F♯, G♯, A♭)

**1 A little slower** (♩ = c. 66)

Vln. I *p ord.* *tutti* *pizz.*

Vln. II *p ord.* *tutti* *pizz.*

Vla. *p ord.* *tutti* *pizz.* *tutti* *p pizz.*

Vc. *p ord.* *tutti* *div.* *tutti* *p pizz.*

Cb. *p ord.* *div.*

9

Fl. 1 *p* *mf* *f*

Fl. 2/  
Picc. *p* *mf* *f*

Ob. 1 *mf* *f*

Ob. 2 *mf* *f*

Cl. 1 *mp* *mf* *f*

Cl. 2 *mp* *mf* *f*

Bsn. 1 *mf* *f*

Bsn. 2 *p* *f*

Hn. 1 *mf*

Hn. 2 *mf*

Hn. 3 *mf*

Hn. 4 *mf*

Tpt. 1 *f*

Tpt. 2 *f*

Tbn. 1 *f*

Tbn. 2 *f*

Tbn. 3 *f*

Tba. *f*

Timp. *f* *f*

Perc. *f*

Hp. *f* *f l.v.* (C<sub>3</sub>, E<sub>3</sub>) (B<sub>3</sub>, E<sub>3</sub>, F<sub>3</sub>)

Vln. I *p pizz.* *f* *p arco* *f*

Vln. II *p pizz.* *f* *p arco* *f*

Vla. *div.* *f* *tutti* *p arco* *f*

Vc. *div.* *f* *tutti* *p arco* *f*

Cb. *f pizz.* *p* *f* *f*



13

Fl. 1

Fl. 2/  
Picc.

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Hn. 3

Hn. 4

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

Tbn. 3

Tba.

Timp.

Perc.

Hp

Vln. I

Vln. II

Vla.

Vc.

Cb.

*mf*

*f*

*p*

*f*

*con sord.*

*senza sord.*

*(senza sord.) p solo*

*f l.v.*

(C, B, E)

*trem.*

*div. a. 2*

17

Fl. 1 *p*

Fl. 2/  
Picc. *p* Change to picc.

Ob. 1 *mp* *p*

Ob. 2 *mp* *p*

Cl. 1 *mp* *p*

Cl. 2 *mp* *p*

Bsn. 1 *p* *p*

Bsn. 2 *p* *p*

Hn. 1 *p sub.* *p con sord.*

Hn. 2 *p sub.*

Hn. 3 *p sub.*

Hn. 4 *p sub.* *p con sord.*

Tpt. 1 *p sub.*

Tpt. 2 *p sub.*

Tbn. 1 *p sub.* *p con sord.*

Tbn. 2 *p sub.* *p con sord.*

Tbn. 3 *p sub.* *p con sord.*

Tba. *p sub.* *p*

Timp. *p* *tr* *p*

Perc. *p* *p* Change to glock.

Hp. (B<sub>3</sub>, F<sub>3</sub>, G<sub>3</sub>)

Vln. I *con sord.* *mp solo* *con sord.*

Vln. II *mp solo* *con sord.*

Vla. *mp solo* *con sord.*

Vc. *mp solo* *con sord.*

Cb. *p solo pizz.* *arco*

**2 Brighter** (♩ = c. 72) rit. . . . .

Fl. 1 Picc. *f* *ff* Change to fl.

Fl. 2/  
Picc. *f* *ff*

Ob. 1 *f* *ff*

Ob. 2 *f* *ff*

Cl. 1 *f* *ff*

Cl. 2 *f* *ff*

Bsn. 1 *f* *ff*

Bsn. 2 *f* *ff*

Hn. 1 *f senza sord.* *ff* *p*

Hn. 2 *f* *ff* *p*

Hn. 3 *fp* *ff* *p*

Hn. 4 *senza sord. fp* *ff* *p*

Tpt. 1 *fp* *ff*

Tpt. 2 *fp* *ff*

Tbn. 1 *senza sord. fp* *p* *ff*

Tbn. 2 *senza sord. fp* *p* *ff*

Tbn. 3 *senza sord.* *p* *ff*

Tba. *p* *ff* *p*

**2 Brighter** (♩ = c. 72) rit. . . . .

Timp. *ff*

Perc. Glockenspiel *f* *f* *ff* Change to Vibes

Hp. (D<sub>2</sub>, B<sub>2</sub>, E<sub>3</sub>, G<sub>3</sub>) *mf* *ff* (D<sub>3</sub>, B<sub>3</sub>, E<sub>4</sub>, G<sub>4</sub>)

**2 Brighter** (♩ = c. 72) rit. . . . .

Vln. I *f* *pizz.* *mf arco* *ff*

Vln. II *f* *pizz.* *mf arco* *ff*

Vla. *f* *pizz.* *mf arco* *ff*

Vc. *f* *pizz.* *mf arco* *ff*

Cb. *mf* *ff* tutti solo

**3 a. tempo** (♩ = c. 66)

Fl. 1 *mf*

Fl. 2/  
Picc. *mf*

Ob. 1 *mf*

Ob. 2 *mf*

Cl. 1 *mf*

Cl. 2 *mf*

Bsn. 1 *mf*

Bsn. 2 *mf*

Hn. 1 *mf*

Hn. 2 *mf*

Hn. 3 *mf*

Hn. 4 *mf*

Tpt. 1 *mf*

Tpt. 2 *mf*

Tbn. 1 *mf*

Tbn. 2 *mf*

Tbn. 3 *mf*

Tba. *mf*

**3 a. tempo** (♩ = c. 66) *t* (N.B. G♯-F♯, B♭-B♭, C♯-B♭)

Timp. *mf*

Perc. *mf*

Hp. *mf* (F♯, A♯) (D♯, A♯)

**3 a. tempo** (♩ = c. 66)

Vln. I *mf* div.

Vln. II *mf* div.

Vla. *mf* div.

Vc. *mf* div.

Cb. *tutti* *mf*

32 **rit.** . . . . . **4** **Very slow** (♩ = c. 60)

Fl. 1 *p*

Fl. 2/  
Picc.

Ob. 1 *p*

Ob. 2 *p*

Cl. 1 *p*

Cl. 2 *p*

Bsn. 1 *p*

Bsn. 2 *p*

Hn. 1 *p*

Hn. 2 *p*

Hn. 3 *p*

Hn. 4 *p*

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

Tbn. 3

Tba.

**rit.** . . . . . **4** **Very slow** (♩ = c. 60)

Timp. *p solo* (II) *gliss.* (III) (F<sub>3</sub>-E<sub>2</sub>, B<sub>2</sub>-A<sub>2</sub>)

Perc. *mp solo*

Hp. *mp solo*

**rit.** . . . . . **4** **Very slow** (♩ = c. 60)

Vln. I

Vln. II

Vla. *mp*

Vc.

Cb.



**5** **Brighter** (♩ = c. 72)

(4.4.4)

Fl. 1 *f* *ff*

Fl. 2/  
Picc. *f* *ff*

Ob. 1 *f* *ff*

Ob. 2 *f* *ff*

Cl. 1 *f* *ff*

Cl. 2 *f* *ff*

Bsn. 1 *f* *ff*

Bsn. 2 *f* *ff*

Hn. 1 *f con sord.* *f senza sord.* *ff*

Hn. 2 *f con sord.* *f senza sord.* *ff*

Hn. 3 *f con sord.* *f senza sord.* *ff*

Hn. 4 *f* *f senza sord.* *ff*

Tpt. 1 *f con sord.* *p senza sord.*

Tpt. 2 *f con sord.* *p senza sord.*

Tbn. 1 *f con sord.* *p senza sord.*

Tbn. 2 *f con sord.* *p senza sord.*

Tbn. 3 *f con sord.* *p senza sord.*

Tba. *p senza sord.*

**5** **Brighter** (♩ = c. 72)

(4.4.4)

Timp. *ff*

Perc. Glockenspiel *f* *ff*

Hp. (B $\flat$ , E $\sharp$ , F $\sharp$ ) *ff*

**5** **Brighter** (♩ = c. 72)

(4.4.4)

Vln. I *f* *sub. p* *ff (full bows)*

Vln. II *f* *sub. p* *ff (full bows)*

Vla. *f* *sub. p* *ff (full bows)*

Vc. *f* *sub. p* *div. a. 2* *tutti* *ff (full bows)*

Cb. *f* *sub. p* *div. a. 2* *ff (full bows)*

44 **rall.** **6 a. tempo** (♩ = c. 66)

Fl. 1

Fl. 2/  
Picc.

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Hn. 3

Hn. 4

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

Tbn. 3

Tba.

**rall.** **6 a. tempo** (♩ = c. 66)

Timp.

Perc.  
Change to Vibes

Hp.  
(C♯, B, E, F)  
Lv.  
(C, B, E, F)

**rall.** **6 a. tempo** (♩ = c. 66)

Vln. I

Vln. II

Vla.

Vc.

Cb.

*mp solo con sord.*

*mp solo con sord.*

*mp solo con sord.*

*mp solo con sord.*



48

Fl. 1

Fl. 2/  
Picc.

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Hn. 3

Hn. 4

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

Tbn. 3

Tba.

Timp.

Perc.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

*mf solo*

*mf*

*p*

*pp*

*mp*

*mp*

*mp*

*p*

*pp*

*p*

*pp*

*p*

*pp*

*p*

*pp*

*tr*

(A<sub>2</sub>-F<sub>2</sub>)

*p*

Vibraphone

*mf*

*pp*

(C<sub>2</sub>, B<sub>1</sub>, E<sub>1</sub>, F<sub>1</sub>)

(D<sub>2</sub>, B<sub>1</sub>, E<sub>1</sub>, G<sub>2</sub>, A<sub>2</sub>)

tutti (con sord.)

*p*

tutti (con sord.)

*p*

tutti (con sord.)

*p*

tutti (con sord.)

*p*

tutti (con sord.)

*p*

*rall.*

*rall.*

*rall.*

**7** **Tempo Primo** (♩ = c. 66)

Fl. 1 *mp* *mf*

Fl. 2/  
Picc. *p* *mp* *mf*

Ob. 1 *mp* *mf* *p solo*

Ob. 2 *mp* *mf*

Cl. 1 *p* *mp* *mf*

Cl. 2 *p* *mp* *mf*

Bsn. 1 *p* *mp* *mf*

Bsn. 2 *mp* *mf*

Hn. 1 *mp con sord.* *mf* *p*

Hn. 2 *mp con sord.* *mf* *p*

Hn. 3 *p con sord.* *mp* *p*

Hn. 4 *p con sord.* *mp* *p*

Tpt. 1

Tpt. 2

Tbn. 1 *p solo*

Tbn. 2

Tbn. 3

Tba.

**7** **Tempo Primo** (♩ = c. 66)

Timp. *p* *mp* *mf* *p sub.*

Perc. *mp* *mf* *l.v.*

Hp. (D<sub>5</sub>, C<sub>5</sub>, E<sub>5</sub>, F<sub>5</sub>, G<sub>5</sub>, A<sub>5</sub>) *mp* (D<sub>5</sub>, C<sub>5</sub>, B<sub>4</sub>, E<sub>5</sub>, F<sub>5</sub>, A<sub>5</sub>) *mf* *p* *l.v.*

**7** **Tempo Primo** (♩ = c. 66)  
(non div.)

Vln. I *mp con sord.* *mf* *p*

Vln. II *p con sord.* *mp* *mf* *p*

Vla. *p con sord.* *mp* *mf* *p*

Vc. *p con sord.* *mp* *mf* *p*

Cb. *div.* *con sord.* *mp* *tutti* *mf* *p sub.*



MMUS PORTFOLIO COMMENTARY:  
SEEING THE INVISIBLE, HEARING THE INAUDIBLE

Ronald MacNiven  
MMus (Composition)  
September 2013



The items I present in this portfolio were composed over a twelve-month interval from October 2012, and reflect the creative preoccupations that concerned me at the time. The first to be written was *Three Mackintosh Studies* for solo piano, followed by a chamber composition *Fjordscape* for the unusual combination of piano, alto saxophone and vibraphone. The final work in the collection is the orchestral work, *A Woman Stares Out From The Kintai Bridge*. This was a period of great change in my life, returning to Glasgow, my home city, after twelve years living and working at sea, so I suppose it was inevitable that both these influences would make their way into the final submission.

Charles Rennie Mackintosh is as much associated with the place of his birth as with his oeuvre, and focusing on his work has been a kind of intellectual homecoming for me. Whilst undertaking my postgraduate studies I was fortunate to be able to examine the original watercolour paintings referenced in *Three Mackintosh Studies* at close hand at The Hunterian Gallery, attached to The University of Glasgow. Working from past recollections in *Fjordscape* however could be viewed as a harking back to my previous life.

On a purely practical level, I wanted my portfolio to consist of a wide variety of media, and this forms a clear and chronological trajectory of scale, from solo keyboard to symphony orchestra.

Another feature of the work in my portfolio is the employment and development of numeric puzzles in the manufacture of musical material, notably sudoku. To solve a standard puzzle each 3x3 box, each row and each column must contain all the numbers 1 to 9. Many hybrid forms exist, including contracted puzzles using only the numbers 1 to 6 (dubbed futoshiki), expanded ones using 1 to 12, and even letters of the alphabet. Generally speaking, the gentler the puzzle is the more recurring number patterns are in evidence, which can be applied in creating melodic or rhythmic motifs, particularly the former. Conversely, more fiendish puzzles can also be of use, especially when eschewing rhythmic familiarity.

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| 5 | 3 |   |   | 7 |   |   |   |   |
| 6 |   |   | 1 | 9 | 5 |   |   |   |
|   | 9 | 8 |   |   |   |   | 6 |   |
| 8 |   |   |   | 6 |   |   |   | 3 |
| 4 |   |   | 8 |   | 3 |   |   | 1 |
| 7 |   |   |   | 2 |   |   |   | 6 |
|   | 6 |   |   |   |   | 2 | 8 |   |
|   |   |   | 4 | 1 | 9 |   |   | 5 |
|   |   |   |   | 8 |   |   | 7 | 9 |

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| 5 | 3 | 4 | 6 | 7 | 8 | 9 | 1 | 2 |
| 6 | 7 | 2 | 1 | 9 | 5 | 3 | 4 | 8 |
| 1 | 9 | 8 | 3 | 4 | 2 | 5 | 6 | 7 |
| 8 | 5 | 9 | 7 | 6 | 1 | 4 | 2 | 3 |
| 4 | 2 | 6 | 8 | 5 | 3 | 7 | 9 | 1 |
| 7 | 1 | 3 | 9 | 2 | 4 | 8 | 5 | 6 |
| 9 | 6 | 1 | 5 | 3 | 7 | 2 | 8 | 4 |
| 2 | 8 | 7 | 4 | 1 | 9 | 6 | 3 | 5 |
| 3 | 4 | 5 | 2 | 8 | 6 | 1 | 7 | 9 |

*Example 1: A typical sudoku puzzle with its solution*

Undoubtedly the overriding theme that binds this entire series of work together is the issue of translating visual images into music, whether in a real sense – as in the Mackintosh studies – or in altogether more surreal ones like *Fjordscape* and *A Woman Stares Out From The Kintai Bridge*. As I moved further away in each piece from describing actual objects, the more difficult it became to formulate substantial interpretations as the subject matter became more esoteric. This creative dilemma manifested itself in more time concentrating on preparing for and outlining each work, to furnish it with substance, and although the mental obstacles of this aesthetic pathway increased considerably with the composition of each piece, in my opinion the artistic rewards were not inconsiderable.

### THREE MACKINTOSH STUDIES

*For solo piano*

- |                |                      |                       |
|----------------|----------------------|-----------------------|
| 1. FRITILLARIA | <i>Freely</i>        | <i>duration c. 3'</i> |
| 2. JAPONICA    | <i>Delicate</i>      | <i>duration c. 3'</i> |
| 3. SPURGE      | <i>With movement</i> | <i>duration c. 4'</i> |

These solo piano pieces were composed between September and December 2012 inspired by botanical watercolours by the Scottish artist Charles Rennie Mackintosh (1868-1928).

Although a sonic representation of the visual media was the primary goal, two other concerns preoccupied me. Throughout I employed a relatively new compositional technique (to me) utilising ‘magic squares’ derived from Japanese Sudoku puzzles. Also, each piece was written for a different pianist, each with their own distinctive performance style, approach and character. I have attempted to reflect this in each one. Unlike the classically-defined idea of a ‘study’ as an aid to expanding a performer’s technique, these studies are a collection of etudes on three levels – in sonic representation, pianistic style and compositional procedure.

The classic Sudoku puzzle consists of a 9×9 grid with digits so that each column, each row, and each of the nine 3×3 sub-grids that compose the puzzle contains all of the digits from 1 to 9. The puzzle setter provides a partially completed grid, which typically has a unique solution. The musical possibilities of this technique occurred to me during a study of the Japanese composer Toru Takemitsu (1930-96). Virtually impossible to analyse in a conventional Western sense, I have always been struck by how his music, particularly in form, seems to meander along yet manages to retain a satisfying sense of proportionality. One possible, elegant solution for this offered itself to me in the form of the Sudoku puzzle.



The numbers 1 to 9 correspond directly to lengths of duration, while in terms of pitch I finally settled on Olivier Messiaen's Third Mode of Limited Transposition, a scale of nine notes divided into three groups of four notes each. It contains the intervals of a tone, semitone, semitone, tone, semitone, semitone, tone, semitone, semitone:



*Example 2: Messiaen's Third Mode of Limited Transposition*

When I started investigating Sudoku puzzles, I worked solely with the 9x9 variety, which determined pitch material. I hunted around for various candidates among nine-note scales and modes, including some exotic Indian ragas, the Blues and Bebop scales, and a wonderful webpage of mathematically synthesised modes (<http://www.allthescales.org/9note.html>). Eventually I plumped for Messiaen's Third Mode because within it you can generate; a whole-tone scale; diatonic major, minor and dominant seventh chords; and limited chromatic content. Therefore a full gamut of tonality (and emotional expression) can be extracted from one nine-note scale. I should also point out that this mode has an affinity with the sound world of Takemitsu, arising many times in his oeuvre.

Although each painting is superficially alike, I detected a progression of detail within the series. Keeping the three pieces similar while at the same time marking differences and creating an individual character within the set, was a major preoccupation during the composition of these studies. The very fact this is a work for solo piano instantly engenders a sense of unity across the whole. In addition, I manipulated the same sudoku-derived magic square for both pitch and durational values for all three pieces. However, I re-assigned the numeric values of the Messiaen mode for each study.



|             |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|
| Fritillaria | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Japonica    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Spurge      | 8 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

*Example 3: modes employed in each study*

Beginning with *Fritillaria* through *Japonica* and *Spurge*, I sensed a feeling of additional colour and ‘filling in’ across Mackintosh’s watercolours, culminating in the full palette of *Spurge*. This I tried to reflect in my treatment of the three piano pieces. In *Fritillaria*, although notated fully, I attempted to create an extemporised feel through the use of irregular time signatures and a sparse, fleeting sense of melodic momentum. Moving on to *Japonica* I tried to inject a warmer, more direct feel of light and shade, with more luscious chords and unity between the performer’s left and right hands interspersed with single out-of-phase lines. For the final work of the canon, *Spurge*, I reflected the almost entire filling in of the painting with denser chords of four and five notes, very little unadorned lines and an almost lilting rhythmic metre in opposition to *Fritillaria*’s nervous improvisatory hesitation.



*Example 4: Japonica, Fritillaria and Spurge (reproduced from Pamela Robertson)*

The three studies are derived from one puzzle, manipulated in a variety of ways:

|  |  |   |   |   |   |   |   |   |   |   |
|--|--|---|---|---|---|---|---|---|---|---|
|  |  | 5 | 8 | 9 | 7 | 4 | 1 | 6 | 2 | 3 |
|  |  | 2 | 1 | 4 | 6 | 8 | 3 | 9 | 7 | 5 |
|  |  | 7 | 3 | 6 | 9 | 5 | 2 | 8 | 4 | 1 |
|  |  | 8 | 9 | 2 | 3 | 6 | 4 | 5 | 1 | 7 |
|  |  | 4 | 6 | 7 | 1 | 9 | 5 | 3 | 8 | 2 |
|  |  | 3 | 5 | 1 | 8 | 2 | 7 | 4 | 9 | 6 |
|  |  | 1 | 4 | 3 | 5 | 7 | 9 | 2 | 6 | 8 |
|  |  | 6 | 2 | 5 | 4 | 1 | 8 | 7 | 3 | 9 |
|  |  | 9 | 7 | 8 | 2 | 3 | 6 | 1 | 5 | 4 |

*Example 5: The sudoku puzzle from which the studies are derived*

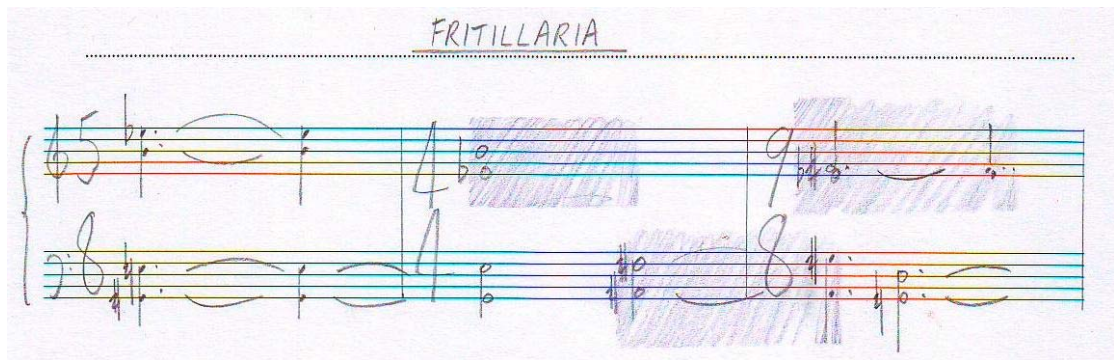
## **FRITILLARIA, Walberswick 1915**

The defining characteristic of this painting is the chequer-work on the petals and signature box, which anticipates the artist's later decorative stencils. The analogy to this visual attribute can be seen in my initial sketch:





Elegant outlines are carefully filled in with barely modulated watercolour wash, and the flower heads' complexity is simplified in order to focus on the petals' striking diced pattern, and this is transferred from the face of the Sudoku boxes to the music, as illustrated in another one of my sketches:



*Example 7: Fritillaria sketch with diced shading*

The emphasis is on the interaction of leaves and stems as they stretch and turn and overlap and touch, and this is marked by the disconnect between the left and right hands.

Mackintosh's concern, according to Pamela Robertson, was "to create decorative surface patterns in which the space between the different elements of the subject becomes as significant as the outlined forms."<sup>1</sup> Overall, the painting displays "an exquisite flat pattern", however one of the flowers petals are peeled open to reveal its interior, and this 'opening out' occurs in the lead up to bar 24:

<sup>1</sup> Pamela Robertson, *Charles Rennie Mackintosh: Art Is The Flower* p.53

19 accel. *p* Ped.

24 (8) *ff* *sub. p* a. tempo

Example 8: ‘opening out’ at bb. 24-25, *Fritillaria*

## JAPONICA, Chiddingston 1910

Regarded as one of Mackintosh’s finest botanical portraits, *Japonica* displays a “great purity of handling.”<sup>2</sup> The focal point of this painting is the shrub’s vivid scarlet flowers.

Again, as in *Fritillaria*, areas are deliberately left untouched by watercolour, to intensify the intricate pattern of overlapping forms. I have tried to imitate this by juxtaposing dense and sparse areas of harmonic shading, for example between the opening of the piece and bar 10:

<sup>2</sup> Robertson p. 45



*Example 9: dense and sparse areas of harmonic shading, Japonica*

Stylistically, Mackintosh's botanical studies are closely related to certain aspects of Japanese painting, as this contemporary account of Japanese drawing technique from an early *Studio* article – of which Mackintosh was a subscriber and contributor – attests:

Simplicity and reticence are apparent in all the best specimens of Japanese art. No redundant lines are allowed to interfere with the desired result, while subtle drawing conveys the appearance of relief.<sup>3</sup>

Indeed, Volume One contained a chapter on 'Artistic Japanese Gardens' by its proprietor, Charles Holme, and subsequent issues included features on oriental flower arranging, stenciling and wood carving.

This horticultural affinity is echoed in the words and music of Takemitsu, who admitted being influenced by the formality of a Japanese garden:

---

<sup>3</sup> Robertson p. 53

My music is like a garden, and I am the gardener. Listening to my music can be compared with walking through a garden and experiencing the changes in light, pattern and texture.<sup>4</sup>

### **SPURGE, Wythyam 1909**

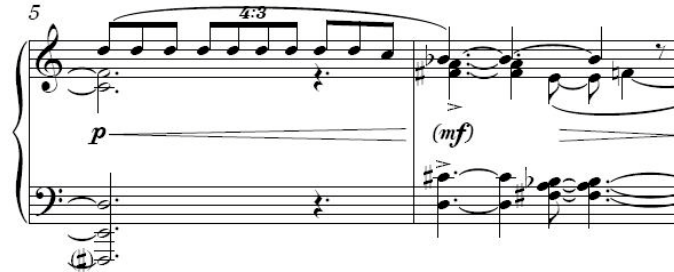
Unique to the series, this is an elaborate composite study, with the spurge plant at the centre surrounded by a periwinkle at the top and two rhododendron flowers to the right, laid out to show structure and create surface pattern using fine pencil drawing and subtle colour washes. My approach to this piece was to employ a more harmonically dense feeling throughout, with a wider keyboard range to reflect the painting's extended colour palette. The three structural elements of the picture find their apotheosis in three musical phrases:

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<sup>4</sup> Conversation between Toru Takemitsu and Karsten Witt, Vienna Contemporary Music Festival November 1993.



## Spurge



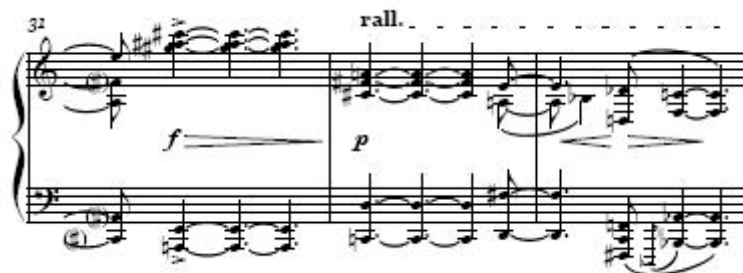
Example 10: *Spurge* b. 5

## Rhododendron



Example 11: *Spurge*, bb. 17-18

## Periwinkle



Example 12: *Spurge* bb. 32-33

There is one final matter to consider in these pieces: each was written with a different performer in mind. Nick Stewart, the dedicatee of *Japonica*, is a considered, measured player. Vicky Yannoula, for which *Fritillaria* was composed, has wide hands and draws upon an

extensive spectrum of colour. And Maria King, for whom I wrote *Spurge*, has a dramatic personality and percussive performance style.

## **FJORDSCAPE**

*for alto saxophone, vibraphone and piano*

*Spacious, with an icy resonance*

*Duration: c. 7'*

*Performed by the Workers Union Ensemble on 5 January 2013 at the RMA Research Students' Conference, Southampton University*

Completed towards the end of 2012, *Fjordscape* was the result of a three-month contract sailing in and around Norway the previous summer. I guess the stark panorama had been working itself into me the whole time, but I was particularly struck one evening, sailing out of the Geirangerfjord towards the North Sea, by ghostly sounds slowly bouncing back and forth across the steep cliffs, reverberating on either side of the wide expanse of water.

Undoubtedly the most important feature in *Fjordscape* for me is the instrumentation. When the RMA invited composers to write for the combination of saxophone, vibraphone and piano for their 2013 conference, I immediately had a template that I knew would perfectly accommodate the ideas stored up over the previous months. The sustained pedal effects of both vibraphone and piano were ideally suited to recreating and enhancing the sounds I heard reflecting across either side of the fjord, the vibraphone's motor adding an icy fluidity in contrast to the dry, solid piano. And the alto saxophone sound, high in its register, was akin to steamy breath on a cold night.

After the comparatively literal treatment of the Sudoku puzzle taken for the *Three mackintosh Studies*, I embarked on a slightly more flexible departure for this work. Instead of one grid to encompass the whole work I assigned two, one for rhythm and one for pitch:

B16 \*\*\*

## Puzzles, mind games and Herculis

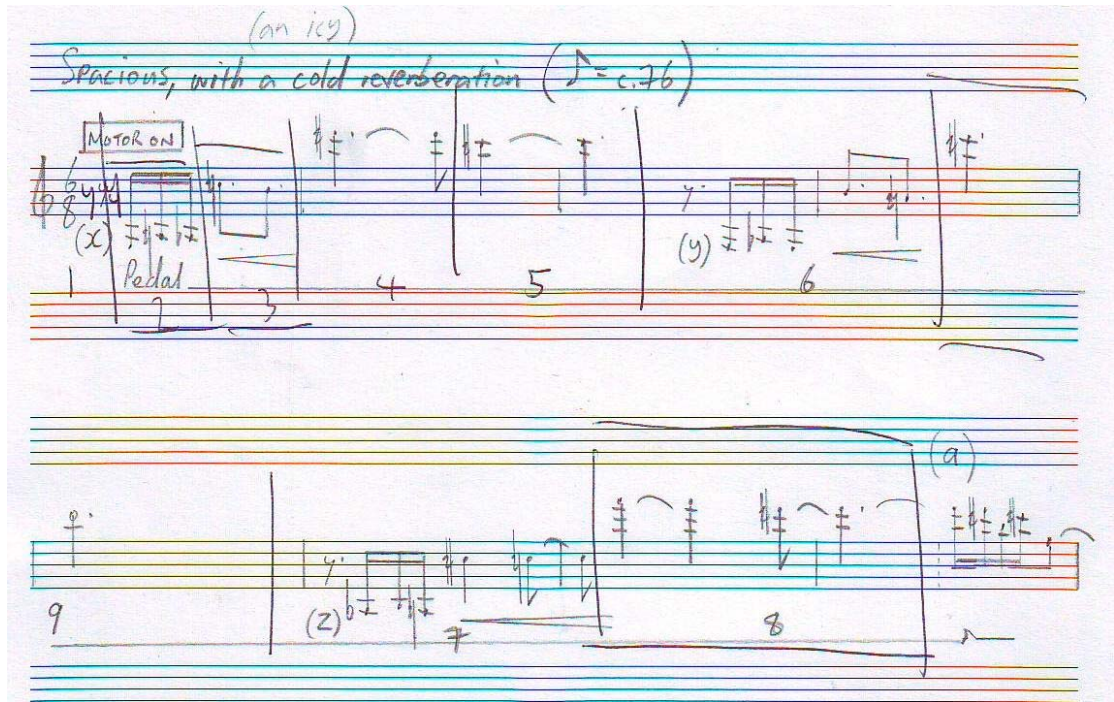
### SUDOKU

To solve this puzzle each 3 x 3 box, each row and each column must contain all the numbers 1 to 9. While the rules are numerous strategies to help you solve sudoku. For hints and information visit [www.sudoku.org.uk](http://www.sudoku.org.uk). Solutions pu

|                  |   |   |   |   |   |   |   |   |   |
|------------------|---|---|---|---|---|---|---|---|---|
| MODERATE NO 1817 | 1 | 5 | 3 | 2 | 7 | 6 | 4 | 8 | 9 |
|                  | 7 | 2 | 9 | 4 | 8 | 3 | 1 | 6 | 5 |
|                  | 8 | 4 | 6 | 5 | 1 | 9 | 3 | 2 | 7 |
|                  | 3 | 7 | 2 | 8 | 5 | 1 | 9 | 4 | 6 |
|                  | 9 | 6 | 5 | 3 | 2 | 4 | 8 | 7 | 1 |
|                  | 4 | 1 | 8 | 6 | 9 | 7 | 5 | 3 | 2 |
|                  | 2 | 8 | 1 | 7 | 4 | 5 | 6 | 9 | 3 |
|                  | 6 | 9 | 4 | 1 | 3 | 2 | 7 | 5 | 8 |
| RHYTHM           | 5 | 3 | 7 | 9 | 6 | 8 | 2 | 1 | 4 |
|                  | 1 | 9 | 8 | 5 | 7 | 4 | 2 | 3 | 6 |
|                  | 4 | 6 | 3 | 1 | 9 | 2 | 7 | 8 | 5 |
|                  | 2 | 7 | 5 | 3 | 6 | 8 | 1 | 4 | 9 |
|                  | 6 | 4 | 2 | 7 | 1 | 5 | 3 | 9 | 8 |
|                  | 5 | 3 | 7 | 6 | 8 | 9 | 4 | 1 | 2 |
|                  | 9 | 8 | 1 | 2 | 4 | 3 | 6 | 5 | 7 |
|                  | 3 | 2 | 9 | 4 | 5 | 6 | 8 | 7 | 1 |
| GENTLE NO 2064   | 7 | 5 | 4 | 8 | 2 | 1 | 9 | 6 | 3 |
|                  | 8 | 1 | 6 | 9 | 3 | 7 | 5 | 2 | 4 |
|                  | 1 | 9 | 8 | 5 | 7 | 4 | 2 | 3 | 6 |
|                  | 4 | 6 | 3 | 1 | 9 | 2 | 7 | 8 | 5 |
|                  | 2 | 7 | 5 | 3 | 6 | 8 | 1 | 4 | 9 |
|                  | 6 | 4 | 2 | 7 | 1 | 5 | 3 | 9 | 8 |
|                  | 5 | 3 | 7 | 6 | 8 | 9 | 4 | 1 | 2 |
|                  | 9 | 8 | 1 | 2 | 4 | 3 | 6 | 5 | 7 |
| PITCH            | 3 | 2 | 9 | 4 | 5 | 6 | 8 | 7 | 1 |
|                  | 7 | 5 | 4 | 8 | 2 | 1 | 9 | 6 | 3 |
|                  | 8 | 1 | 6 | 9 | 3 | 7 | 5 | 2 | 4 |

Example 13: sudoku puzzles that form the foundation of Fjordscape

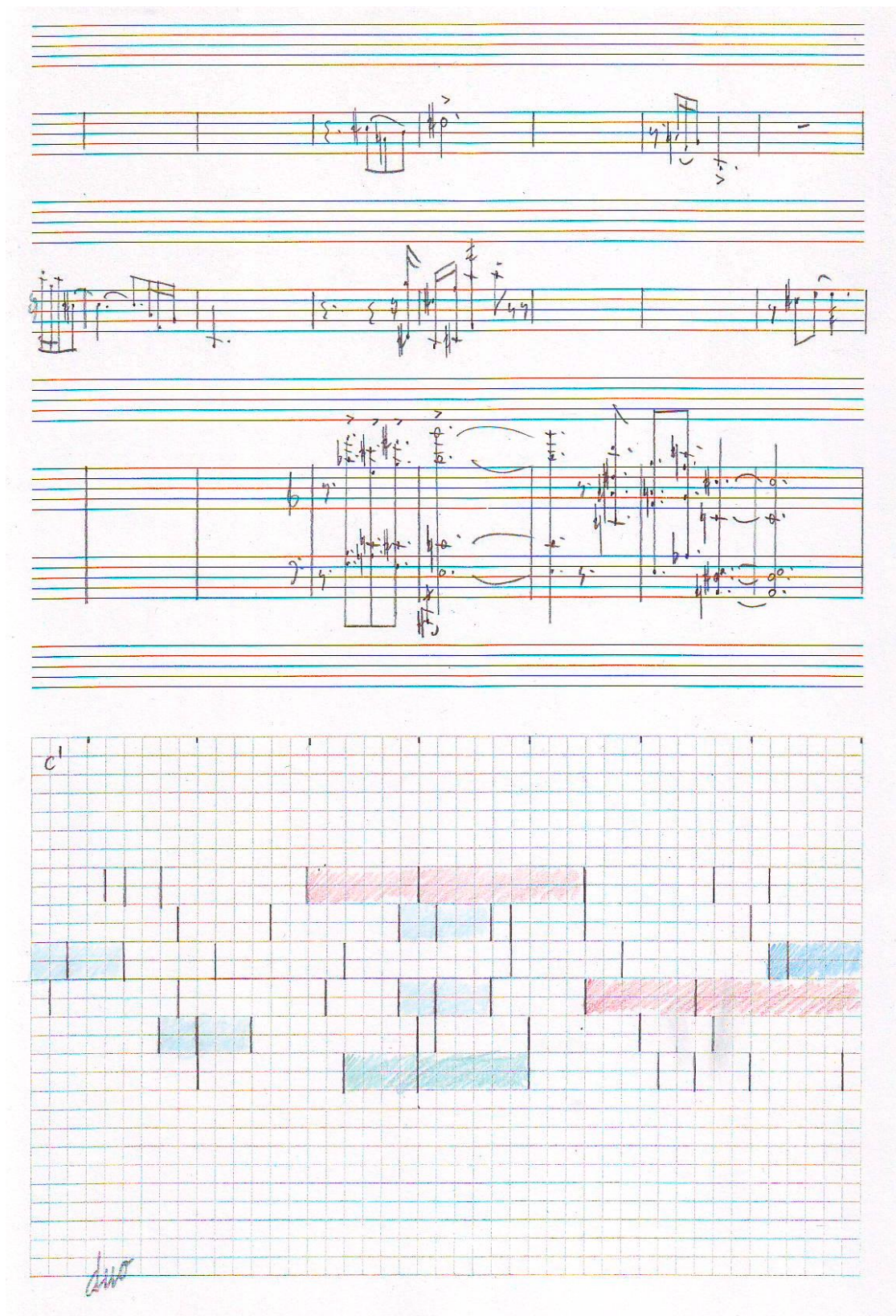
Rather than assigning single rhythmic values, in *Fjordscape* I assigned different motifs to each number:



*Example 14: subdivision of opening material into melodic and rhythmic motifs*

Thus, important 'landmarks' could be plotted out within each section:





*Example 15: Fjordscape sketch with plotted 'landmarks'*

## **A Woman Stares Out From The Kintai Bridge**

*for orchestra*

*Moderate and Sustained*

*Duration: c. 11'*

The two previous works that make up my portfolio are derived from real, physical things; a response to three watercolour paintings, and a palpable, potent memory. But how do you write a piece of music about something you have never seen? This was the dilemma that faced me when I set about writing *A Woman Stares Out From The Kintai Bridge*.

The roots of this work go back to 2001, when a friend told me she had visited the famous Kintai Bridge at Iwakuni, a small town in the Sanyo district of Japan. That night I had a vivid dream of a woman standing on the bridge, gazing up at the sky and down into the river populated with birds and fish. I should reiterate that at this point I had never set eyes on the bridge in any way.

Some pieces come together very quickly; inspiration, technique and purpose coming together in a single moment of realisation. Others gestate over a long time, ideas distilling over a period of months or years. This piece falls into the latter category. We all have dreams, some more than others, and the vast majority of these are forgotten by the time we've finished our cornflakes. This one however had such a profound effect on me that I had to coagulate it, pin it down.

And so over subsequent years I began to gather any information about the bridge I could find. Pictures, postcards, structural information and engineering details; all were collected and stored in a scrapbook as I attempted to add flesh to the bare bones of my esoteric dream, even

things not directly associated with the bridge. As months turned into years, the scrapbook of information became a wall of images, each slowly turning the vaporous dream in something corporeal, progressively converting these images into a work for orchestra.

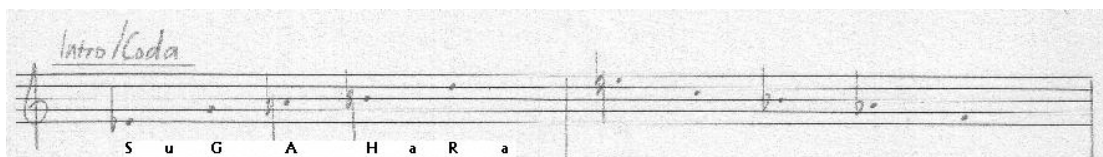


*Example 16: three postcard images from my ‘scrapbook of information’*

Spanning the transparent waters of the Nishiki River, the graceful five-arched Kintai Bridge was constructed in 1673 under the orders of Hiroyoshi Kikkawa, a feudal lord of the time. 210 meters long and 5 meters wide, and was constructed without the use of a single nail, employing only clamps and wire.

Finally at the end of 2012 I felt ready to embark on my piece. The starting point for the entire work is a curve-shaped fragment of ten notes, mirroring the shape of the bridge’s five arches.



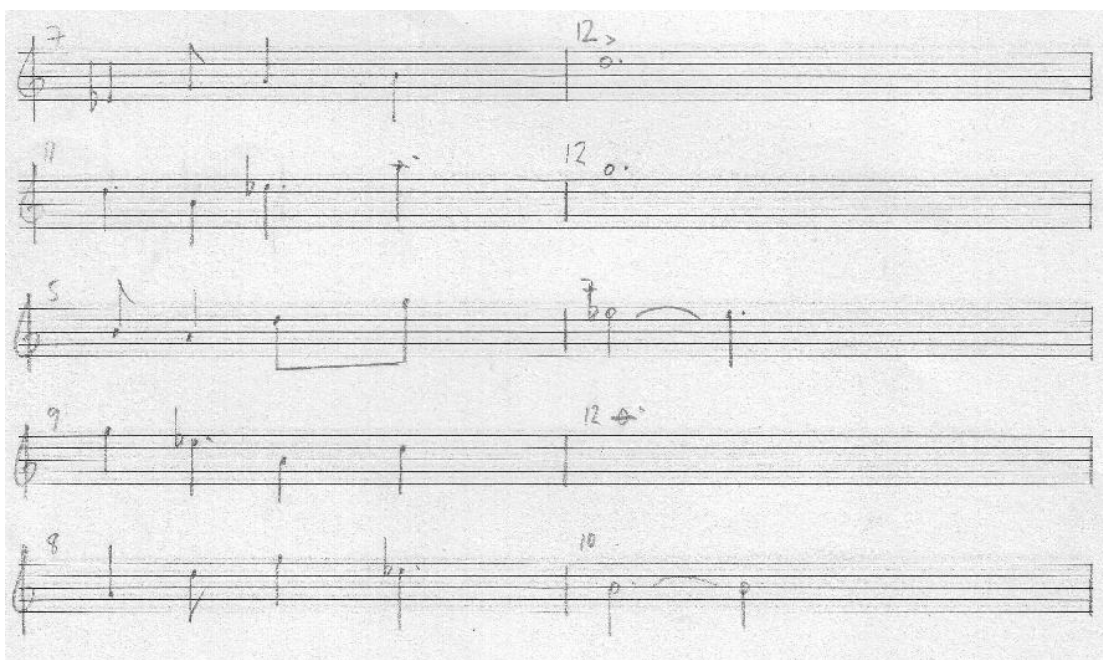


*Example 17: the curve-shaped fragment at the heart of the work*

The first half consists of the notes E-flat, G, A, B and D which are derived from the surname of the friend who originally visited the bridge (adopting the German nomenclature S for E-flat and H for B-natural.)

The second half is then manufactured from the retrograde inversion the first, starting on E-natural. These ten notes define the pitch organisation of the whole piece.

From this fragment I drew out five melodic motifs and their corresponding inversions.



*Example 18: the five main melodic motifs*

Clearly a 9x9 sudoku template would not hold ten pitches, so I utilised a 12x12 puzzle to accommodate them.

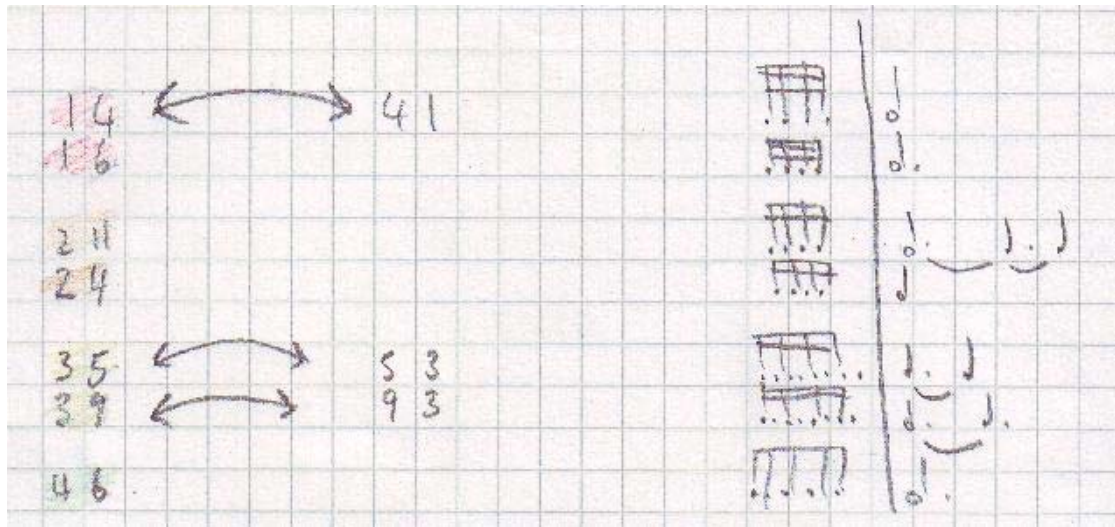
| SECTION 2 |    |    |    |    |    |    |    |    |    |
|-----------|----|----|----|----|----|----|----|----|----|
| 5         | 2  | 9  | 4  | X  | 7  | 10 | X  | 1  | 8  |
| X         | 6  | 1  | 2  | 3  | 10 | 8  | 7  | X  | 9  |
| 4         | X  | 10 | 8  | 6  | 5  | 3  | 9  | 2  | 7  |
| 3         | 8  | 7  | X  | 1  | 9  | 4  | 6  | 5  | 10 |
| 10        | 4  | 6  | X  | 9  | 3  | 7  | 1  | 8  | X  |
| 7         | 9  | X  | 6  | X  | 4  | 5  | 2  | 3  | 1  |
| 1         | X  | 2  | 10 | 5  | 8  | 6  | X  | 9  | 3  |
| 8         | 5  | 3  | 1  | 7  | 2  | X  | 10 | 4  | 6  |
| 9         | 10 | 8  | 5  | 4  | X  | 2  | 3  | 7  | X  |
| 6         | 7  | 4  | 3  | 10 | X  | 1  | 5  | X  | 2  |
| 2         | 3  | X  | 9  | 8  | 1  | X  | 4  | 6  | 5  |
| X         | 1  | 5  | 7  | 2  | 6  | 9  | 8  | 10 | 4  |

|                |                |
|----------------|----------------|
| 1 = B $\sharp$ | 6 = C          |
| 2 = E $\flat$  | 7 = A $\sharp$ |
| 3 = F          | 8 = A $\flat$  |
| 4 = G          | 9 = E $\sharp$ |
| 5 = B $\flat$  | 10 = D         |

*Example19: harmonic pitch rotation square for Section 2*

Three exact transpositions of the initial ‘surname’ exist within the ten pitches on E, A-flat and B, formed the basis of the work’s harmonic development. I envisioned a three-tiered hierarchy of these motifs corresponding to the sky, the bridge and the river. From the notes left over from these motifs I fashioned counter-subjects analogous to the birds and fish of my dream.

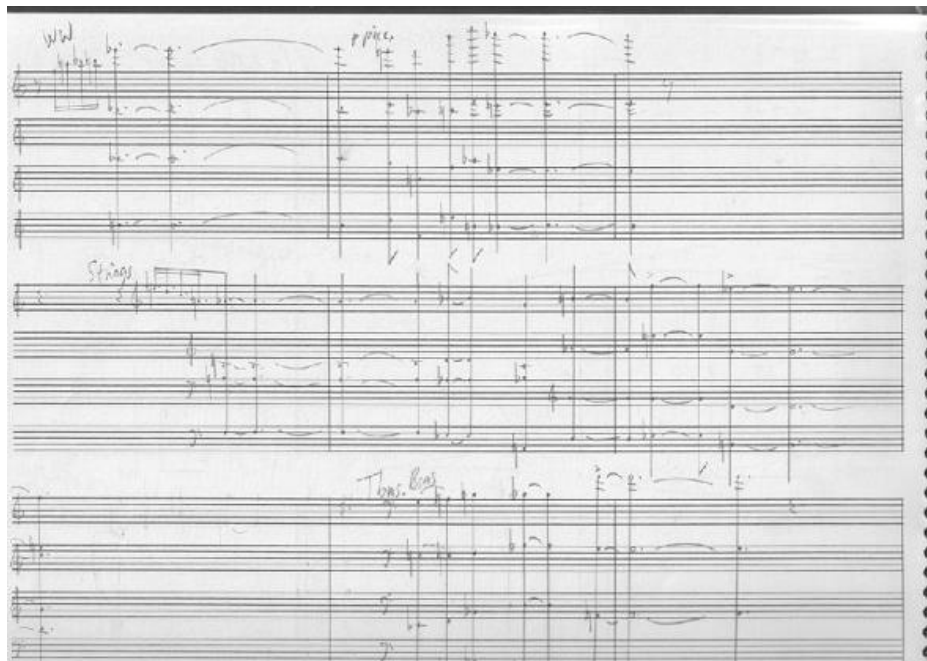


*Example 20: 'bird' and 'fish' counter-subjects*

The structure of my piece is broadly equivalent to the structure of the Kintai Bridge i.e. the three extensive central arches and two shorter outer arches are comparable with the three main sections of my work, framed by a brief introduction and coda. The introduction and coda set out the source material in its basic form while the three main sections develop the three harmonic hierarchies, with the E, A-flat and B derivatives on top respectively.

For the rhythmic and durational side of the work I put to use another, different 12x12 sudoku square. I assigned rhythmic values to the melodic motifs and counter-motifs (along the same lines as in *Fjordscape*) and plotted them out within subsets of each 90° rotation of the square.





*Example 22: a page from the sketched draft of A Woman Stares Out From The Kintai Bridge*

Orchestration plays an important part in this physical identification, on both an individual and collective level. Broadly speaking, the orchestra's string, wind and brass sections are identified in turn with the bridge, sky and river. The wind and brass sections could therefore be described as reflections of the string section's material in air and water. The harp and percussion are associated with the eponymous woman of the title.

Individually speaking, the solo oboe's line at bar 5 returns on the same instrument at bar 48 as the music winds down, an aural signpost to the work's conclusion. Also, similar-sounding material at bars 23 and 39 herald the beginning of new sections.

The overriding aspect in the act of selection of harmonic material is its sound quality. Once material has been generated via sudoku grids, it is meticulously tested through repeated playing on the piano. Some simply don't work for me (although they may be perfectly adequate for another composer's



means), many are functional (suitable for transitional material between high points), and a very few are exceptional. When these sound they make my spine tingle and are the ones I use to signify important moments – both structural and emotional – within a work.

As far as future challenges are concerned I feel I have hardly scratched the surface of potential for the techniques I have outlined in this submission. Future explorations could include utilising smaller or larger Sudoku grids, which range from six numbers up to twelve and beyond. Another evolution could involve assigning different number values within existing grids and incorporating smaller grids within larger ones. The most important benefit in any of these is the constant retention of mathematical (and musical) proportionality within the overall structure.

I also see the value of developing harmonic structures both inside and out of Messain's models. Changing only one note of his Third Mode can drastically alter its harmonic characteristics. And I believe the infinite variety of other modes and scales, some of which I mentioned earlier, could be used to fruitful effect. A 12x12 Sudoku grid could accommodate the complete chromatic scale, and even larger ones could incorporate microtonal divisions. However I'm not as yet sure how I would maintain my stylistic integrity outwith the current self-imposed boundaries.

There are as many reasons for composing as there are composers in the world, but for me writing music is an unloading, a release of recurrent impulses, memories and emotions. And I love solving puzzles. I think *A Woman Stares Out At The Kintai Bridge* was particularly difficult to bring together because, unlike its two predecessors, I did not initially have a definite physical stimulus to draw upon. I needed to create a physical hinterland in the form of my scrapbook before I could proceed with the writing process. This prompted me to recollect a quote by something Takemitsu once wrote: "Perhaps I am one of those who try to see the invisible, to hear the inaudible."<sup>5</sup>

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<sup>5</sup> Toru Takemitsu, *Confronting Silence* p. 142

When trying to place my work within a wider context, I think any artist – any human being for that matter – is an amalgamation of every experience they have ever had. Narrowing this down however, certain strands do take rise to prominence in my artistic vocabulary; optical stimulus, be it a reaction to visual art, design, or a physical landscape. This leads on to my love of travel, facilitated by my career in music, and the exotic scenery and extremes of climate I have witnessed. And I suppose this devotion to the exotic has also facilitated the absorption of Takemitsu into my musical style. This absorption is borne out of an admiration for his musical sound world and a desire to try to understand his elusive and veiled techniques. Many of the strides I have made in my own work has been a direct result of trying fathom the processes concealed within his output.

Although the inception of *A Woman Stares Out At The Kintai Bridge* preceded the other two works in this portfolio by many years, I now realise that their composition was an important and necessary milestone in the completion of the orchestral work. It may seem obvious now but this certainly was not the case as I assembled the portfolio over the course of the year, and is perhaps evidence for the maxim that while working on your research, unknowingly your research is quietly also working on you. The gradual separation of reality from subject matter required to create each piece in turn has been a useful mental tool, which I hope to develop in future projects as I attempt to break free from the literal to the inexact meaning in an art form which by its very character is abstract in nature.

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Conversation between Toru Takemitsu and Karsten Witt, General Manager of the Vienna Konzerthaus, during the Contemporary Music Festival on November 4, 1993 is available to view online at [http://www.artistinterviews.eu/?page\\_id=62=22/](http://www.artistinterviews.eu/?page_id=62=22/)